This information is distributed solely for the purpose of predissemination peer review. It has not been formally disseminated by NOAA. It does not represent any final agency determination or policy.

Retrospective Analysis for the Gulf of Maine cod ASPM Reference case assessment

Rebecca A. Rademeyer and Doug S. Butterworth

MARAM (Marine Resource Assessment and Management Group)
Department of Mathematics and Applied Mathematics
University of Cape Town, Rondebosch 7701, South Africa

A retrospective analysis is conducted for the Gulf of Maine cod Reference Case Age-Structured Production Model (ASPM) (Butterworth and Rademeyer, this GARM meeting), for each year from 2004 to 1997. In the interest of simplicity, the analysis is carried out by removing one year's data at a time without recalculating averages. Thus, for example, the pre-1982 mid-year weights-at-ages are computed as the average over the 1982-2004 period, regardless whether the actual data are used up to 1997 or 2004.

Fig. 1 plots the spawning biomass trajectories (in absolute terms and in terms of pre-exploitation levels) for the retrospective analyses, as well as the corresponding fully selected fishing mortality trajectories. No consistent pattern over recent years is evident.

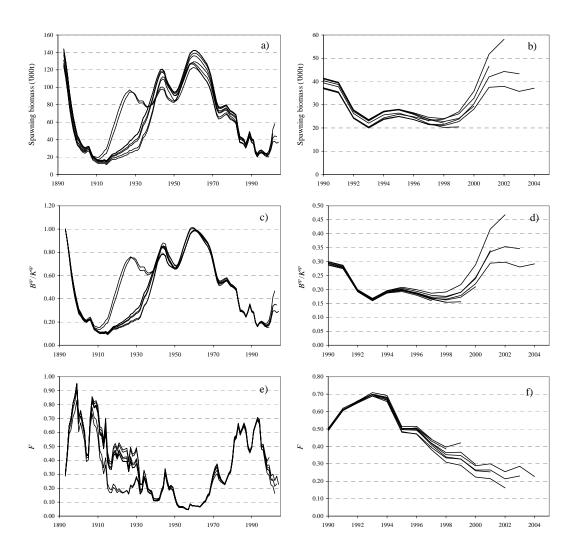


Fig.1: Retrospective analysis of Gulf of Maine cod from the Reference Case ASPM for spawning biomass (in absolute terms, top panels, and relative to pre-exploitation levels, middle panels) and fully selected fishing mortality (lower panels).